

IN THE SPECIFICATION

Please amend the paragraph starting at page 3, line 9 as follows. ✓

a- An exemplary auto-calibrating method for use with a reflection spectrometer comprises the following steps. An initial calibration of the spectrometer is performed. A background scan is performed with the light source on and the ~~second~~ shutter assembly closed. A background scan is performed, if required, with the light source off and the ~~second~~ shutter assembly open. A background scan is performed with the light source off and the ~~second~~ shutter assembly closed. A sample scan of the sample under measurement is performed with the light source on and ~~second~~ shutter assembly open.

Please amend the paragraph starting at page 3, line 16 as follows. ✓

a-2 An exemplary auto-calibrating method for use with a transmission spectrometer comprises the following steps. An initial calibration of the spectrometer. A background scan of the first and second detectors is performed with the light source on and the ~~second~~ shutter assembly closed. A background scan is performed, if required, of the first and second detectors with the light source off and the ~~second~~ shutter assembly open. A background scan is performed, if required, of the first and second detectors with the light source off and the ~~second~~ shutter assembly closed. A sample scan is performed using the first detector of an unknown sample with the light source on and ~~second~~ shutter assembly open.

Please amend the paragraph starting at page 10, line 35 as follows. ✓

a-3 It is to be understood that the fiber-optic ~~cable 14~~ cable 14 may be replaced by an appropriate number of lenses and a beam splitter (illustrated by the dashed box at the top of Fig. 1). One possible reason for not using the fiber-optic cable 14 is poor transmission. Most fiber-optic cables 14 do not transmit below 220 nm. Essentially, if the fiber-optic cable 14 is not used, a beam splitter is located somewhere before the optical element 15. An example of a beam splitter that may be used is a 50% non-polarizing 45-degree beam splitter. Light from the lamp 11 would either transmit or reflect from the beam splitter to reach the optical element 15. On the return path, the reflected light from the optical element 15 would either reflect or transmit from the beam splitter to reach the detector 21. An optical designer skilled in the art can select the appropriate lenses so that (a) light from the lamp 11 is delivered efficiently to the sample 17, and (b) reflected light from both the sample 17 and optical element 15 is delivered efficiently to the detector 21.